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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,269	01/18/2001	Richard J. Lipton	1234-US	6157

9941	7590	05/19/2005

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EXAMINER
POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/765,269	LIPTON ET AL.
	Examiner	Art Unit
	Peter Poltorak	2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 November 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>22-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>22-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment, and remarks therein, received on 7/30/2004 have been entered and carefully considered.

2. The Amendment canceled claims 1-21 and introduces claims 22-27.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

4. Applicant's arguments have been carefully considered but they were not found persuasive.

5. Applicant expresses the opinion that claims 22-27 are not taught by *Sprague et al.* but applicant's arguments are mainly directed towards the cancelled claim 1 and none towards the newly introduced claims 22-27.
Since claim 1 is very similar to the newly introduced claim 22 the examiner addresses applicant's arguments in regard to claim 1 as though they were directed toward claim 22 in an attempt to assist applicant in understanding the examiner's correlation of the cited art with regard to applicant's invention <u>as claimed</u>.

6. Applicant argues that in *Sprague et al.* "the proposed security applet must be small enough to fit into outboard RAM on the crypt unit" and as a result the teaching does not read on a number of the bits in a stream but rather on applets.

7. The examiner points out that applets are small programs and execution, reading, writing etc. of these programs results in a stream of bits.

8. Furthermore, applicant argues that the inventive method involves "the identification of the existence of a possible virus program not only by the writing, reading and matching of the predetermined number of bits from a transmitted stream of bits but also by determining if any of the bits attempted to be written to the memory are also being transmitted improperly to a storage or other device, whether within the system or on the network."

9. The examiner points out that the claim language (claim 22) does not reflect the arguments cited above. For example, the language does not mention any virus programs but merely talks about "the existence of one more unknown programs". Similarly, although claim 9 recites the limitation of "any of the bits attempted to be written to the memory are also being transmitted improperly to a storage or other device, whether within the system or on the network"; this limitation is preceded by "or" and as a result it is ignored in claim 22.

10. Claims 22-27 have been examined.

Claim Objections

11. The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

12. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

13. Claim 26 recites "and identifies the existence of the one or more unknown programs if the bits read from memory do not match the bits attempted to be written to the memory or any of the bits attempted to be written to the memory have also been improperly transmitted to a storage or other device."
The limitation as stated does not clearly state whether determination if "any of the bits attempted to be written to the memory have also been improperly transmitted to a storage or other device " is required before the existence of the one or more unknown programs is identified.

14. Claims 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by *Sprague et al. (U.S. Patent No. 6449720).*

15. As per claim 22 *Sprague et al.* teach attempting to write a predetermined number of bits from a stream of bits to the memory in the system, wherein the predetermined number of bits is based on the size of the memory *(Sprague et al., col. 3 lines 9-11)*, reading from the memory a number of bits equal to the predetermined number of bits attempted to be written to the memory *(Computed MAC is compared, Sprague et al., col. 10 lines12-17)*, determining if the bits read from the memory match the bits attempted to be written to the memory *(inspect, Sprague et al., col. 3 lines 35-39)*, identifying by the spy device the existence of one more unknown programs if the read bits do not match the bits attempted to be written or if any of the bits attempted to be written to the memory are also being improperly transmitted to a storage or other device *(recognized/known?, col. 9 line 28-32 and col.10 lines 18-20).*

16. As per claim 23 and 24 data inherently is transferred in stream of bits and *Sprague et al.* teach the predetermined number of bits that are attempted to be written to the memory include a pseudo-random sequence of bits *(Cryptographic keys, Sprague et al., col. 6 lines 22-23)*.

17. Claim 27 is rejected under 35 U.S.C. 102(e) as being anticipated by *Porras et al.* *(U.S. Patent No. 6321338)*.

18. *Porras et al.* teach a computer system comprising a processor, a memory and a spy device *(PC with a monitor device, Fig. 6, col. 14, line 46-48)*, the spy device observing the computer system internal operations to detect if a stream of bits transmitted to the computer system from a server have been improperly transmitted to a storage or other device within the computer system or transmitted back over the network to another computer system and *(col. 1 lines 55-58, col. 2 lines 24-27)*, if so, alerting the server *(col. 2 lines 4-7)*.

19. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sprague et al. (U.S. Patent No. 6449720)* in view of *Ji (U.S. Patent No. 5983348)* and further in view of *Schnurer et al. (U.S. Patent No. 5842002)*.

20. *Sprague et al.* teaches a system as discussed above. *Sprague et al.'s* invention is directed towards verifying applets in a computer system and not in a client server environment and as a result *Sprague et al.* does not teach the limitation "receiving at the client system from a server a stream of bits".

However, the use of applets in a client/server environment is an old and well-known practice as illustrated by *Ji (col. 1 lines 39-51)*. One of ordinary skill in art at the time

of applicant's invention would have been motivated to employ the use of applets in a client/server environment (that would read on receiving at the client system from a server a stream of bits) as taught by *Ji* to take advantage of many Internet and network computing technology.

21. *Sprague et al.* teaches determining if the bits read from the memory match the bits attempted to be written to the memory as discussed above.

Sprague et al. does not explicitly teach determining that a virus <u>may</u> have entered the system if either the bits read from the memory do not match the bits attempted to be written to the memory.

However, it is old and well-known that mismatch of information can be a sign of viruses. *Ji* explicitly discusses a technique similar to *Sprague et al.'s* invention wherein bits read from the memory don't match the bits attempted to be written to the memory suggest that a virus may have entered *(Ji, col. 1 lines 26-39)*. One of ordinary skill in art at the time of applicant's invention would determine that a virus <u>may</u> have entered the system if either the bits read from the memory do not match the bits attempted to be written to the memory *(as taught by Ji)* in order to minimize potential damages.

22. *Ji* teaches applet with digital signature being transferred from a server to a client *(as discussed above)* and as such it reads on bits being transmitted to a storage device or other device. Verification of the applet as safe *(Ji, col. 1 lines 35-39)* reads on a proper transfer and it is implicit that a lack of verification reads on an improper transfer.

23. Neither *Sprague et al.* nor *Ji* teach transmitting a message back to the server if it is

determined that a virus may have entered the system.

Schnurer et al. teach transmitting a message back to the server if it is determined

that a virus may have entered the system *(Schnurer et al., col. 8 lines 27-35)*.

It would have been obvious to one of ordinary skill in the art at the time of applicant's

invention to transmit a message back to the server if it is determined that a virus

may have entered the system as taught by *Schnurer et al.* One of ordinary skill in the

art would have been motivated to perform such a modification in order to prevent

potential spread of viruses.

24. Claims 26 and 27 are substantially equivalent to claim 25; therefore claims 26 and

27 are similarly rejected.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

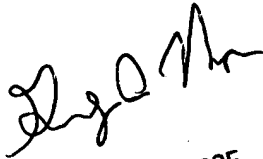extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571)272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Signature

5/12/05

Date

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